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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,880	02/10/2004	Bart Vandewal	1316N-001656	1427
27572 7590 12/27/2006 HARNES, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			EXAMINER SY, MARIANO ONG	
			ART UNIT 3683	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		12/27/2006	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/775,880	VANDEWAL, BART	
	Examiner	Art Unit	
	Mariano Sy	3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,6,8-12 and 20 is/are pending in the application.
- 4a) Of the above claim(s) 6 and 8-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,12 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 2, 2006 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miller (US 6,667,555) in view of Keijzer et al. (US 3,857,580).

Re-claim 1 Miller et al. disclosed, as shown in fig. 2-5 a pressure tube 12 forming a working chamber; a gas disposed within the working chamber; a first piston 18 dividing the working chamber into an upper and a lower working chambers; a source of pressurized gas in selective communication with the working chamber; and a pressure control unit in communication with said source of pressurized gas for continuously controlling pressure of said pressurized gas disposed within said upper and lower working chambers; a first valve 25, 26 for controlling flow of said gas through said first

Art Unit: 3683

piston; and a valve control unit controlling opening and closing of said first valve, see abstract, col. 1, lines 66-67 and col. 2, lines 1-13.

However Miller et al. failed to disclose the first valve is an electronic valve and the pressure control unit operating independently from the valve control unit.

Miller et al. disclosed in "Background of the Invention" (see col. 1, lines 24-34) that "Many controllable dampers have an electrical control signal routed to the piston. An example of such damper is disclosed in U.S. Pat. No 6,007,345 to Francis et al. Other dampers have a pneumatic control signal routed to the piston. An example of this type of damper is disclosed in U.S. Pat. No. 4,886,466 to Doherty et al."

It would have been obvious to one of ordinary skill in the art to utilize the known electronic valve instead pneumatic valve into the damper of Miller et al., as a matter of design choice that has the same function of opening and closing the valve on the piston.

Keijzer et al. teaches the use of a control unit with a source of pressurized gas for continuously controlling pressure of pressurized gas disposed within said upper and lower working chambers.

It would have been obvious to one of ordinary skill in the art to merely utilize the known control unit with a source of pressurized gas for continuously controlling pressure of pressurized gas disposed within said upper and lower working chambers into the damper of Miller et al., as taught by Keijzer et al., in order to constantly maintain pressurized gas in the damper.

Art Unit: 3683

4. Claims 12 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller in view of Grundei et al. (US 5,971,117) and in view of Keijzer et al. (US 3,857,580).

Re-claims 12 and 20 Miller et al. disclosed, as shown in fig. 2-5 a damper comprising: a pressure tube forming a working chamber; a pressurized gas disposed within the chamber; a first piston dividing the chamber into an upper and lower working chambers; a valve for controlling flow of gas through the piston and a control unit in communication with the valve for controlling opening and closing of the valve; a source of pressurized gas in selective communication with the working chamber; and a valve control unit in communication with said source of pressurized gas for continuously controlling pressure of said gas disposed within the upper and lower working chambers.

However Miller et al. failed to disclose the valves are an electronic valve and also failed to disclose the damper further comprising a second piston disposed within the upper working chamber; a first valve for controlling flow of gas through the first piston; a second valve for controlling flow of gas through the second piston and the pressure control unit operating independently from the valve control unit.

Miller et al. disclosed in "Background of the Invention" (see col. 1, lines 24-34) that "Many controllable dampers have an electrical control signal routed to the piston. An example of such damper is disclosed in U.S. Pat. No 6,007,345 to Francis et al. Other dampers have a pneumatic control signal routed to the piston. An example of this type of damper is disclosed in U.S. Pat. No. 4,886,466 to Doherty et al."

It would have been obvious to one of ordinary skill in the art to utilize the known electronic valve instead pneumatic valve into the damper of Miller et al., as a matter of design choice that has the same function of opening and closing the valve on the piston.

Grundei et al. teaches, as shown in fig. 1, the use of two pistons with respective damping valves.

It would have been obvious to one of ordinary skill in the art to utilize the known two pistons with respective damping valves for controlling flow of gas through the piston and a control unit in communication with the valves for controlling opening and closing of the valves on the damper of Miller et al., in view of the teachings of Grundei et al., as a mere duplications of parts and in order to effectively damp vibrations cause by irregular road surfaces.

Keijzer et al. teaches the use of a control unit with a source of pressurized gas for continuously controlling pressure of pressurized gas disposed within said upper and lower working chambers.

It would have been obvious to one of ordinary skill in the art to merely utilize the known control unit with a source of pressurized gas for continuously controlling pressure of pressurized gas disposed within said upper and lower working chambers into the damper of Miller et al., as taught by Keijzer et al., in order to constantly maintain pressurized gas in the damper.

Art Unit: 3683

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariano Sy whose telephone number is 571-272-7126.

The examiner can normally be reached on Mon.-Fri. from 8:30 A.M. to 2:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James McClellan, can be reached on 571-272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

msy M. Sy

December 7, 2006

DEVON C. KRAMER
PATENT EXAMINER

Devon Kramer
12/21/06